

POTAPOV, Ivan Ivanovich -- awarded sci degree of Doc Med Sci for the
6 May 57 defense of dissertation: "Materials on the question of the
clinical ~~treatment~~ and surgical treatment of tumors of the
pharynx and the outer ring of the larynx" at the Council, Geol Inst,
AS, USSR; Prot No 14, 31 May 58.

(BMVO, 11-58, 20) No. 4, sp. 6, line 1

POTAPOV, I. I.

Geology

The solution of present-day scientific problems which arise from the development of national economy, constitutes the basic object of Rostov Univ. scientists. Forecasts on the industrial coal, oil and gas deposits of the Eastern Donets Basin and the adjoining territory, is the subject of research conducted by numerous geologists of Rostov Univ., jointly with the geologists of the Volga-Don Geological Admin. The leading men are: Professors A. I. Yegorov, I. I. POTAPOV and Docent I. A. Shamray.

SO: Vestnik vysshey shkoly, No. 11, 1958, Uncl.

POTAPOV, I.I., doktor med.nauk (Moskva)

Closed fistula of the horizontal semicircular canal [with summary
in English]. Vest.-eto-rin. 21 no.1:97-103 Ja-F '59 (MIRA 12:1)

1. Is kliniki bolezney ukha,gorla i nosa (dir. - deystvitel'nyy
chlen AMN SSSR prof. B.S. Preobrazhenskiy) II Moskovskogo
meditsinskogo instituta.

(SEMICIRCULAR CANALS, fistula
closed of horizontal canal, surg. (Rus))

POTAPOV, I.I., doktor med.nauk (Moskva)

Methods of conservative treatment in chronic suppurative otitis media with reference to their classification. Vest.otorin. 21 no.4:35-48 Jl-Ag '59. (MIRA 12:10)

1. Iz kliniki bolezney ucha, nosa i gorla (dir. - deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR zasluzhennyy deyatel' nauki prof. B.S. Preobrazhenskiy) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(OTITIS MEDIA ther.)

LEBEDEV, A.V., aspirant

Technic of endophotography in cancer of the larynx. Vest. otorin.
22 no.2:93-96 Mr-Ap '60. (MIRA 13:12)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - doktor med.neuk
I.I.Potapov) TSentral'nogo instituta usovershenstvovaniya vrachey
i kliniki bolezney ukha, gorla i nosa (zav. - zasluzhennyy deyatel'
nauki RSFSR prof. I.Ya.Sen'dul'skiy) Moskovskogo oblastnogo
nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F.
Vladimirs'kogo.

(LARYNX neoplasms)
(PHOTOGRAPHY)

LEBEDEV, A.V., aspirant

Color endophotography of cancerous tumors of the larynx. Zhur.
ush., nos. i gorl. bol. 20 no. 3:31-34 My-Je '60. (MIRA 14:4)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - doktor med.nauk
I.I. Potapov) TSentral'nogo instituta usovershenstvovaniya vrachey
i otorinolaringologicheskoy kliniki (zav. - zasluzhennyj deyatel'
nauki RSFSR prof. I.Ya. Sendul'skiy) Moskovskogo oblastnogo
nauchno-issledovatel'skogo instituta imeni M.F. Vladimirsogo.
(LARYNX---CANCER) (PHOTOGRAPHY, MEDICAL)

POTAPOV, Igor', Ivanovich; YEGOROV, A.I., prof., otd. red.;
KORNILOV, Ye.A., red.

[Geotectonics; a textbook] Geotekhnika; uchebnoe posobie.
Rostov-na-Donu, Izd-vo Rostovskogo univ., 1964. 251 p.
(MIRA 18:7)

KUDRYAVTSEV, N.T.; PSHILUSSKI, Ya.B.; POTAPOV, I.I.

Investigating chromium sulfate solutions for the electrolytic
deposition of chromium. Izv.vya.zhe.navet.khim.i khim.tekh.
(MIRA 15:12)
no.4:617-620 '62.

1. Moskovskiy khimiko-tehnologicheskiy institut imeni
Mendeleyava, kafedra tekhnologii elektrokhimicheskikh
proizvodstv.
(Chromium sulfate) (Chromium—Plating)

POTAPOV, I. I., prof. (Moskva)

Development of Soviet otorhinolaryngology. Vest. otorin. no.5:3-4
'61. (MIRA L:12)

(OTOLARYNGOLOGY)

DEMİN, V.M.; POTAPOV, I.I., prof., otv. red.; KOVALENKO, Yu.V., red.
izd-va; PAVLICHENKO, M.I., tekhn. red.

[Radiometric methods of searching for uranium ores; land
survey] Radiometricheskie metody poiskov uranovykh rud; pe-
shekhodnaia s"emka. Rostov-na-Donu, Izd-vo Rostovskogo univ.,
1962. 105 p. (MIRA 15:9)
(Uranium ores) (Radioactive prospecting)

POTAPOV, I.I.

Origin of the Earth. Izv.vys.ucheb.zav.; geol.i razv., 5 no.1:3-18
Ja '62. (MIRA 15:2)

1. Rostovskiy gosudarstvennyy universitet.
(Earth)

POTAPOV, I.I.; POGOSOV, V.S.; ZBEROVSKAYA, N.V.

In memory of Honored Scientist and Professor Aleksandr Isidorovich Fel'dman. Vest. otorin. 22 no. 6:115-116 '60. (MIRA 14:1)
(FEL'DMAN, ALEKSANDR ISIDOROVICH, 1880-1960)

Determining the composition of oil-field water by the analysis of its mixture with sea water. I. I. Potapov.
Azerbaidzhanshoe Neflyanoe Khaz. 1936, No. 12; 29-34.
There are given a nomogram permitting the calcn. of ions
and therefrom the concns. of various ingredients of sea
and oil-well waters and the necessary conversion equations.
A. A. Bochtingk

ASB-SEA METALLURGICAL LITERATURE CLASSIFICATION

FOTAIKOV, I. I.

Geology

"Electrical Core Sampling in Petroleum Geology (Apsheronkiy Peninsula)",
Gostoptekhizdat, 1948

Summary No. 60, 26 May 52; ER-52056899

POTAPOV, I. I.

"Concerning certain controversial questions in the geology of petroleum," (O nekotorykh
diskussinnykh voprosakh geologii nefti), Aznefteizdat [Publishing House of the State
All-Union Association of the Azerbaijani Oil and Gas Industry?], 1951.

POTAPOV, I. I.

"Problem of the Formation of Petroleum Layers" (Deposits of Nonmetal Ores, Oil and Natural Gases), Izv. AN Azerb. SSR, No. 9, 1953, EP 29-51 (Azerbaijani resume)

Abs

w-31146, 1 Feb 55

POTAPOV, I.I.

Origin of the Apsheron productive stratum. Trudy Inst.geol.AN
Azerb.SSR 15:170-190 '54. (MIR 9:1)
(Apsheron Peninsula--Petroleum Geology)

POTAPOV, I.I.

USHAKOV, Anatoliy Petrovich; POTAPOV, I.I., redaktor; AL'TMAN, T.B.,
tekhnicheskiy redaktor.

[The Surakhany oil field; structural geology and oil-bearing
capacity] Surakhanskoe neftianoe mestorozhdenie; tektonika i
neftenosnost'. Baku, Azerbaidzhanskoe gos. izd-vo neftianoi i
nauchno-tekhn. lit-ry, 1955. 177 p.
(Surakhany--Oil fields)

POTAPOV, I.I.

D.

USSR/ Cosmochemistry. Geochemistry. Hydrochemistry

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 115⁴¹

Author : Potapov I.I.
Inst : Academy of Sciences Ukrainian SSR
Title : Petroleum Formation and Forming of Petroleum Deposits in the Light of
the Existence in the Apsheron Productive Stratum of "Hanging" Deposits

Ori Pub : Materialy Diskussii po probleme proiskhozhdeniya i migratsii nefti.
Kiev, AN USSR, 1956, 126-138

Abstract : See RZhKhim, 1956, 35707

Card 1/1

L 38173-66 EWT(m)/EWP(t)/ETI IJP(c) JD/HW/JG
ACC NR: AP6021079 (A) SOURCE CODE: UR/0365/66/002/002/0216/0220

AUTHOR: Kudryavtsev, N. T.; Potapov, I. I.; Mel'nikova, M. M.

ORG: Moscow Chemico-Technological Institute im. D. I. Mendeleyev (Moskovskiy khimiko-tehnologicheskiy institut)

TITLE: Analysis of the electrolytic deposition of a Co-Cr alloy

SOURCE: Zashchita metallov, v. 2, no. 2, 1966, 216-220

TOPIC TAGS: electroplating, cobalt, chromium, optimum process, magnetic property, temperature dependence, current density, alloying, METAL COATING, ELECTROLYTIC DEPOSITION

ABSTRACT: The Cr content of Co-Cr alloy coatings, % electric current yield, coercive force, inductive saturation, residual inductance and coefficient of orthogonality were measured as functions of electrolyte composition, pH, temperature and current density in solutions of Cr- and Co sulfates + amino acetic acid. The conditions for obtaining good coatings of Co-Cr alloys (5-15% Cr) are given. It was established that some of the factors contributing to changes in the composition of the alloy also affect the magnetic properties. Additions of cobalt sulfate ranging from 0.25 to 1.0 g-equiv/l lowered the Cr and increased the Co content of the coatings. The electric current yield increased from 10 to 33% at 6 a/dm² and from 18 to 41% at 10 a/dm² for the same cobalt sulfate changes. Above 10 a/dm² the quality of the coatings was poor.

UDC: 621.357.7

Card 1/2

L 38173-66
ACC NR: AP6021079

By increasing the temperature from 20 to 50°C, the % yield rose and the quality of the coatings improved, although the Cr content decreased from 10 to 3%. The lowering of pH from 2.5 to 1.5 dropped both the % yield and the Cr content. Alloy coatings, obtained under optimum electrolyzing conditions, had a low coercive force (20-50 oe) and a residual inductance of 5000-6000 gs. With increases in current density from 2 to 10 a/dm² and pH from 1.5 to 2.5 the coercive force dropped as a result of the increase in Cr content. At pH=2 the coefficient of orthogonality went through a maximum but increased with current density. The orthogonality of the hysteresis loop improved with increase in temperature from 20 to 50°C, while the coercive force went through a maximum at 40°C, probably due to a phase transformation in the coating. Orig. art. has: 7 figures.

SUB CODE: 11,14/ SUBM DATE: 22Jul65/ ORIG REF: 011/ OTH REF: 001

Card 2/2 vmb

KUDRYAVTSEV, N.T.; POTAPOV, I.I.; SOROKINA, N.G.

Investigating the electrolytic deposition of chromium from
solutions of its trivalent compounds. Zashch. met. i no. 3;
304-307 My-Je '65. (MIRA 18-8)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni D.I.
Mendeleyeva.

POTAPOV, I.I.

Geologic development of the earth. Analele geol geogr 17 no.3:
3-19 Jl-S '63.

VOYACHEK, V.I., prof., Geroy Sotsialisticheskogo Truda; UNDRITS, V.F.,
prof.; LIKHACHEV, A.T., prof., zasluzhennyy deyatel' nauki;
POTAPOV, I.I., doktor med.nauk, prof.; FOTIN, A.V., dotsent,
kand.med.nauk

Active member of the Academy of Medical Sciences of the U.S.S.R.
and Honored Scientist, Professor Boris Sergeevich Preobrazhenskii;
on his 70th birthday. Vest.otorin. no.483-9 '62. (MIRA 16:3)

1. Deystvitel'nyy chlen AMN SSSR (for Voyachek). 2. Chlen-
korrespondent AMN SSSR (for Undrits).
(PREOBRAZHENSKII, BORIS SERGEEVICH, 1892-)

POTAPOV, I.I., prof.

Prophylaxis for hearing disorders. Nauch. trudy Chetv. Mosk. gor.
klin. bol'. no.1:259-263 '61. (MIRA 16:2)

1. Iz kliniki bolezney ukha, nosa i gorla (zav. - prof. I.I. Potapov)
TSentral'nogo instituta usovershenstvovaniya vrachey na baze Oto-
rinolaringologicheskogo otdeleniya Moskovskoy gorodskoy klinicheskoy
bol'nitsy no.4 (glavnnyy vrach - G.F. Papko).
(EAR--DISEASES)

PREOBRAZHENSKIY, B.S., prof.; POTAPOV, I.I., prof.; BELKIN, V.R., mladshiy nauchnyy sotrudnik; GORKIN, N.S., inzh.; SMIRNOV, B.A., inzh.

Instruments for manipulations within the esophagus. Vest. otorin. (MIRA 16:3)
no.4:92-95 '62.

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov Ministerstva zdravookhraneniya SSSR (dir. M.G. Anan'yev), kafedry otorinolaringologii (zav. - deystvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauki prof. B.S. Preobrazhenskiy) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i otorinolaringologicheskoy kafedry (zav. - prof. I.I. Potapov) Tsentral'nogo instituta usovershenstvovaniya vrachey.
(ESOPHAGUS—EXPLORATION)

POTAPOV, I.I.

Problem of earth's origin. Analele geol geogr 16 no.3:107-123 Jl-^{4g}
'62.

S/169/62/000/011/001/077
D228/D307

AUTHOR: Potapov, I.I.

TITLE: Problem of the origin of the earth

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1962, 4,
abstract 11A7 (Izv. vyssh. uchebn. zavedeniy, Geol.
i razvedka, no. 1, 1962, 3-18)

TEXT: The existing concepts concerning nebular evolution,
the formation of stars and the origin of planets are reviewed. In
the author's opinion the evolution of stars from hot giants to red
dwarfs is accomplished in 3-5 billion years; the primordial sun po-
ssessed a mass not less than 5 times in excess of the present value,
and contained the majority of heavy elements that form part of the
Earth, including thorium, radium, and uranium. Earth could not have
been formed by the condensation of solid cold particles, since its
mass is insufficient to ensure self-fusion of cold cosmic matter,
necessary for the density-separation into a number of geospheres,
such as exist within the globe. [Abstracter's note: Complete trans-
lation]

Card 1/1

POTAPOV, I.I.

Geological development of the earth. Izv.vys.ucheb.zav.; geol.i
razv. 5 no.6:3-17 Je '62. (MIRA 15:7)

1. Rostovskiy gosudarstvennyy universitet.
(Earth)

POTAPOV, I.I., doktor med.nauk (Moskva)

Benign tumors of the pharynx. Med. sestra 19 no.12:24-27 D '60.
(MIRA 13:12)

(PHARYNX—TUMORS)

POTAPOV, I.I., doktor meditsinskikh nauk

"Collection of articles of the Lvov Branch of the All-Union
Otorhinolaryngological Society." Reviewed by I.I.Potapov.
Vest. otorin. 22 no.1:97 Ja-F '60. (MIRA 14:5)
(OTOLARYNGOLOGY)

POTAPOV, Ivan Ivanovich

[Benign tumors of the pharynx; clinical aspects and surgical treatment] Dobrokachestvennye opukholi glotki; klinika i khirurgicheskoe lechenie. Moskva, Medgiz, 1960. 180 p.
(PHARYNX—TUMORS) (MIRA 13:8)

POTAPOV, I.I.

Classification of tectonic structures. Sov. geol. 3 no.8:66-74 Ag
'60. (MIRA 13:9)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Geology, Structural)

3(5) PHASE I BOOK EXPLOITATION SOV/2302

Akademiya nauk Ukrainskoy SSR. Institut geologii polozheniy i ekspoly-

eskikh

Problema migratsii nefti i formirovaniya nefrianykh i gasovykh sko-
denii: materialy L'evyashoy diskussii 8-12 maya 1957 g. [problem
of Oil Migration and the Formation of Oil and Gas Accumulations;
Materials of the Discussion Held in Lvov, May 8-12, 1957] Moscow,
Gosgeotekhnizdat, 1959. 422 p. 1,100 copies printed.

Eds.: V. B. Porfir'yev, Academician of the Ukrainian SSR Academy of
Sciences, and I. O. Brod, Professor; Exec. Ed.: P. R. Tereshov, Professor,
Tech. Ed.: A.S. Polozan; Editorial Board: I.O. Brod, Professor,
N.M. Ladyzhensky, and V.B. Porfir'yev, Academician of the Ukrainian
Academy of Sciences.

PURPOSE: This collection of articles is intended for a wide range of

geologists and research workers interested in oil problems.

COVERAGE: Articles contained in this book deal with the problems of
migration and accumulation of oil and gas. These problems were
discussed in May 1957 at Lvov State University in: I. Franko at-
a meeting organized jointly by the Institute of Geology and Min-
eral Resources, Academy of Sciences of the USSR, the Department of
Geology and Oil Exploration of the Lvov Polytechnic Institute,
and the Lvov Geological Society. Theories on the origin of pet-
roleum deposits and the conditions surrounding their occurrence
are treated. There are 327 references; 232 Soviet, 86 English,
5 French, and 4 German.

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Opening Address by the President of the Organization Committee of the Conference V.B. Porfir'yev	5
REPORTS	

Gabilyan A.M. [Institut Geologii, Tashkent] The Problem of the
Formation of Oil and Gas Deposits Illustrated by the Deposits in
Eastern Central Asia 296

Potapov I.I. [State University, Rostov] Conclusions on the For-
mation of Oil Deposits in the Asperonovskaya Region 302

Sachkov Ya.M. [VNIIGRI, Leningrad] The Significance of Ruptures in
the Formation of Oil Deposits on Seafloor and Latest Information
on Measured Reservoirs 306

POTAPOV, Ivan Ivanovich, prof.; ZBEROVSKAYA, Nina Viktorovna;
KALINA, Valentin Osipovich; VOLKOV, Yu.N., red.; PARAKHINA,
N.L., tekhn. red.

[Tympanoplasty] Timpanoplastika. Moskva, Medgiz, 1963. 166 p.
(MIRA 16:12)
(TYMPANAL ORGAN--SURGERY)

I 11983-66 EWT(1)/EWA(j)/T/EWA(b)-2 JK

ACC NR: AP6000770

SOURCE CODE: UR/0243/65/000/009/0045/0049

AUTHOR: Dombrovskaya, Yu. F.; Potapov, I. I.; Kitsayev, A. V.; Demjánov, G. Ye.

ORG: Moscow Division of Lenin Medical Institute im. I. M. Sechenov (Moskovskiĭ ordena Lenina meditsinskii institut); Central Institute of Physicians' Graduate Studies (Tsentral'nyy institut usovershenstvovaniya vrachey); All-Union Scientific Research Institute of Medical Instruments and Equipment (Vsescyuznyy nauchno-issledovatel'skiy institut meditsinskikh instrumentov i oborudovaniya)

TITLE: Hand operated electroaerosol generator and its clinical application

SOURCE: Meditsinskeya promyshlennost' SSSR, no. 9, 1965, 45-9

TOPIC TAGS: medical equipment, aerosol dispenser, electric generator, clinical medicine, charged particle

ABSTRACT: Electroaerosol therapy with aerosol particles of approximately identical electric charge can be easily applied with this generator for individual inhalation, called Electrosol - 1 and developed by VNIIMIO. It works with compressed air at 0.3 atmospheres or more and

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UDC: 615.417.1-032: (615.473.9: 621.313.12)

L 11983-66

ACC NR: AP6000770

has a simple pulverizer for dispersing the medication, which is electrically charged in the same operation. The inhalator can be safely turned in any direction and the particles can be positively or negatively charged. The current is 127-220 volts AC. It can also be used for simple inhalation and is easily disassembled for cleaning and sterilization. Clinical application (mostly with negatively charged aerosol) involves daily or every other day inhalations of 5-15 minutes for adults and 3-7 minutes for children. Up to 30 treatments may be given and the course may be repeated after 3-4 weeks. This treatment has been found to have a favorable effect on respiratory organs, blood chemistry and circulation. Antibiotic inhalation obviates the need for repeated injections. The generator may also be used for disinfection and in industry for thin film deposits. This apparatus has been tested, accepted and recommended for commercial production. Orig. art. has: 1 figure.

SUB CODE: 06, 07, 14/ SUBM DATE: 26Apr65/ ORIG REF: 006/ OTH REF: 002

OC
Card 2/2

ACCESSION NR: AP4036805

8/0286/64/000/009/0011/0011

AUTHOR: Potapov, I. N.; Polukhin, P. I.; Osadchiy, V. Ya.; Finagin, P. M.;
Mogilevkin, F. D.; Golubchik, R. M.; Tartakovskiy, I. K.

TITLE: A method for rolling seamless thin-walled pipes. Class 7, No. 162089

SOURCE: Byul. izobr. i tovar. znakov, no. 9, 1964, 11

TOPIC TAGS: pipe rolling, seamless pipe, thin-walled pipe, rolling mill, pipe
rolling mill, metal rolling

ABSTRACT: This author's certificate introduces a method for rolling seamless thin-walled pipes by the intensive rolling (burnishing) method. In order to increase the mill productivity and reduce the thickness of the pipe walls (for example a wall thickness of 1.5 mm and more at a diameter : wall thickness ratio of 12-30), the burnishing (intensive rolling) is carried out on a conical mandrel in a rolling mill with three rollers. The working rollers of the mill are made in the form of two cones.

ASSOCIATION: none

Card: 1/2

ACCESSION NR: AP4036806

SUBMITTED: 16Jan63

DATE ACQ: 02Jun64

ENCLs: 00

SUB CODE: MM

NO REP Sov: 000

OTHER: 000

Card 2/2

LEBEEV, Yu.G.; POTAPOV, I.N.

Mechanization of the removal of hot metal from the roll train.
Metallurg 10 no.6:30-31 Je '65. (MIRA 18:6)

1. Zavod "Elektrostal".

POLUKHIN, P.I., doktor tekhn.nauk, prof.; POTAPOV, I.N., inzh.; FINAGIN, P.M.,
inzh.

Adjustment of drives for pipe-rolling mills securing a steady
rotation of rolls. Vest.mashinostr. 43 no.9:18-21 S '63.
(MIRA 16:10)

POTAPCV, I.P., inzh.

Clean and lubricating forms. Bet. i chel.-bet. no.4:158-189
Ap '61. (MIRA 14:6)
(Concrete construction--Formwork)

POTAPOV, I.S.; FINOGENOV, V.P.; SOLODKIN, R.G.; KAPELINSKIY, Yu.N.;
MENZHINSKIY, Ye.A.; SEROVA, L.V.; POKROVSKIY, A.N.;
PEVZNER, Ya.A.; LEPEDEV, B.I.; VLADIMIRSKIY, L.K.;
MATYUKHIN, I.S.; RCGOV, V.V.; PISKOPPEL', F.G., doktor ekon.
nauk, prof., red.; SHLENSKAYA, V.A., red.izd-va; ZINCHENKO,
V.S., red.izd-va; PAVLOVSKIY, A.A., tekhn. red.

[Foreign trade of capitalist countries] Vneshniaia torgovlia
kapitalisticheskikh stran. [By] I.S.Potapov i dr. Moskva,
Vneshtorgizdat, 1963. 456 p. (MIRA 16:9)
(Commerce)

POTAPOV, I.T., inzh.

Organization of storage facilities during shipbuilding with the
use of plastic materials. Sudostroenie 29 no.6:44-46 Je '63.
(MIRA 16:7)

(Plastics--Storage) (Shipbuilding materials)

POTAPOV, I. T., inzh.

Improving the supply of materials and equipment. Sudostroenie
28 no.10:46-47 0 '62. (MIRA 16:1)

(Shipbuilding materials)

POTAPOV, I.V.; KLEYMENOV, V.V.

Use of electronic computers with continuous action in water
hammer analysis. Trudy NPI 157:75-85 '64.

(MIRA 19:1)

AUBAKIROV, Zhaksylyk Aubakirovich; SEMENOVA, M.I., kand.geograf.nauk,
otv.red.; POTAPOV, I.Ye., red.; ALFEROVA, P.F., tekhn.red.

[Alma-Ata Province; economic and geographical description]
Alma-Atinskaia oblast'; ekonomiko-geograficheskaiia kharakteristika.
Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1959. 137 p.
(MIRA 12:8)
(Alma-Ata--Economic conditions)

POTAPOV, Kh.; ZAKUSILO, P.

Hidden potentialities for reducing production costs on collective farms. Vop.ekon. no.9:111-119 S '61. (MIRA 14:8)
(Collective farms—Costs)

SHAMBERG, V.; KURILIN, N.; KAYYE, V.; POTAPOV, Kh.

Publication of economic literature in 1959. Vop.ekon. no.2:
134-141 F '59. (MIRA 12:5)
(Bibliography--Economics)

GORSHKOV, M.P., nauchnyy sotr.; KOLYCHEV, L.I., nauchnyy sotr.;
KOTOV, G.G., nauchnyy sotr.; KUZ'MINA, V.I., nauchnyy sotr.;
RUMYANTSEVA, A.V., nauchnyy sotr.; SELINA, N.G., nauchnyy
sotr.; CHEREPKOVA, I.V., nauchnyy sotr.; POTAPOV, Kh.Ye.,
red.; OVCHINNIKOV, N.G., red.; PONOMAREVA, A.A., tekhn. red.

[Raising the level of the development of collective farm opera-
tion] Povyshenie urovnia razvitiia kolkhoznogo proizvodstva.
Moskva, Izd-vo ekon. lit-ry, 1961. 236 p. (MIRA 15:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut eko-
nomiki sel'skogo khozyaystva. 2. Vsesoyuznyy nauchno-issledova-
tel'skiy institut ekonomiki sel'skogo khozyaystva (for Gorshkov,
Kolychev, Kotov, Rumyantseva, Selina, Cherepkova, Kuz'mina).
(Farm management)

LAPTEV, I.D., starshiy nauchnyy sotr.; BUYANOV, P.S., starshiy nauchnyy sotr.; KASSIROV, L.N., starshiy nauchnyy sotr.; TERYAYEVA, A.P., starshiy nauchnyy sotr.; SUVOROVA, L.I., starshiy nauchnyy sotr.; SIDOROVA, M.I., starshiy nauchnyy sotr.; SEMEN, S.I., starshiy nauchnyy sotr.; Prinimali uchastiye: ARKHIPOV, A.I., mladshiy nauchnyy sotr.; VAZYULYA, P.F., mladshiy nauchnyy sotr.; KARLYUK, I.Ya., mladshiy nauchnyy sotr.; KANAUKHOVA, Ye.I., mladshiy nauchnyy sotr.; KRYLOVA, T.N., mladshiy nauchnyy sotr.; ROMANOVSAYA, L.S., mladshiy nauchnyy sotr.; CHISTOV, G.N., mladshiy nauchnyy sotr.; POTAPOV, Kh.Ya., red.; GERASIMOVA, Ye.S., tekhn. red.

[Communal funds of collective farms and the distribution of collective farm income] Obshchestvennye fondy kolkhozov i raspredelenie kolkhoznykh dokhodov. Moskva, Izd-vo ekon. lit-ry, 1961. 386 p. (MIRA 15:3)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Sektor ekonomiki sel'skogo khozyaystva Instituta ekonomiki Akademii nauk SSSR (for Laptev, Buyanov, Kassirov, Teryayeva, Suvorova, Sidorova, Semin).

(Collective farms--Income distribution)

ROZHIN, Vasiliy Petrovich; POTAPOV, Kh.Ye., red.; PONOMAREVA, A.A.,
tekhn. red.

[Some problems in improving the economy of weak collective
farms] Nekotorye voprosy pod"ema ekonomiki slabykh kolkho-
zov. Moskva, Izd-vo ekon. lit-ry, 1961. 154 p.

(MIRA 15:2)

(Collective farms)

SEMIN, Sergey Ivanovich, kand. ekonom. nauk; POTAPOV, Kh.Ye., red.; PONOMAREVA, A.A., tekhn. red.

[Undivided funds and ways to narrow the difference between collective-farm cooperative property and public property] Nedelimye fondy i puti sblizheniya kolkhozno-kooperativnoi sobstvennosti s obshchenarodnoi. Moskva, Izd-vo ekon.lit-ry, 1961. 180 p. (MIRA 14:11) (Collective farms--Finance) (Property)

TSAGOLOV, N.A., prof., red.; POTAPOV, KH.Ye., red.; PONOMAREVA, A.A.,
tekhn. red.

[Developing collective farm property during the period of the large-scale building of communism] Razvitiye kolkhoznoi sobstvennosti v period razvernutogo stroitel'stva kommunizma. Pod red. i so svtup. stat'sei N.A.TSagolova. Moskva, Izd-vo ekon.lit-ry, 1961. 446 p.
(MIRA 14:12)

1. Moscow. Universitet. Kafedra politicheskoy ekonomii.
(Collective farms) (Property)

MISHCHENKO, Ivan Grigor'yevich; UR'YEV, YEvel' Abramovich; DROZDOV, B.T.,
red.; POTAPOV, Kh.Ye., red.; FONOMAREVA, A.A., tekhn. red.

[Role of Siberia in the economics of the country's agriculture]
Rol' Sibiri v ekonomike sel'skogo khozaiistva strany. Moskva, Izd-
vo ekon.lit-ry, 1961. 228 p.
(MIRA 14:12)
(Siberia—Agriculture)

POTAPOV, Kh., i ZAKUSILO, P.

Ways to economize on expenditures for agricultural production.
Vop. ekon. no.12:60-69 D '62. (MIRA 16:1)

(Collective farms—Costs)

STOROZHEV, V.I.; KORKUNOV, I.N.; RUDAKOV, Ye.V.; MELLINYY, S.A.;
LUKOVNIKOVA, S.V.; POTAROV, Kh.Ye.; ZAKUSILO, P.S.;
ZAVERENYAYEVA, L.V., red.; GERASIMOVA, Ye.S., tekhn. red.

[Triumph of the Lenin cooperative plan in socialist
countries] Pobeda leninskogo kooperativnogo plana v stra-
nakh sotsializma. Moskva, Izd-vo ekon. lit-ry, 1963. 274 p.
(MIRA 16:4)

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsiali-
sticheskoy sistemy.

(Europe, Eastern--Agriculture, Cooperative)
(Collective farms)

POTAPOV, Khariton Yefremovich; ZAKUSILO, Pavel Stepanovich; KALASHNIKOVA,
V.S., red.; TRUKHINA, O.N., tekhn. red.

[Ways of lowering unit costs of production on collective farms]
Puti snizheniya sebestoimosti produktsii v kolkhozakh. Moskva,
Gos. izd-vo sel'khoz. lit-ry, 1960. 142 p. (MIRA 14:7)
(Collective farms--Costs)

DAYON, M.I.; POTAPOV, L.I.

Spectrum of μ -mesons underground at a depth equal to ~ 40 m
of water. Zhur.eksp. i teor.fiz. 36 no.3:697-706 Mr '59.
(MIRA 12:5)

1. Fizicheskiy institut im. P.M.Lebedeva AN SSSR.
(Mesons--Spectra)

DAYON, M.I.; POTAPOV, L.I.

Measuring the masses of cosmic ray particles underground.
Zhur.eksp. i teor.fiz. 36 no.3:921-922 Mr '59. (MIRA 12:5)

1. Fizicheskiy institut im. P.N.Lebedeva AN SSSR.
(Cosmic rays)

POTAPOV, I. S. Ed.

Mezhdunarodnaya torgovlya (International trade) Pod red. I. S. Potapov,
G. S. Roginskiy, Yu. N. Kapelinskiy. Moskva, Vneshtorgizdat, 1951.
686 p. tables.

E. J. B.

601 Plaza Dr.

Catalytic action of quaternary ammonium salts. I. V. Potapov
and V. A. Goltschmidt (*J. Phys. Chem. Russ.*, 1941, **15**, 1094 –
1103). – The additive reactions between $\text{N}(\text{Pr})_3\text{Me}$ (I) and $\text{C}_2\text{H}_5\text{Br}$ (II)
and between $\text{C}_2\text{H}_5\text{N}$ and (II) in MeOH and EtOH are accelerated by
 $\text{C}_2\text{H}_5\text{N}(\text{Pr})_3\text{MeBr}$ (III) and $\text{C}_2\text{H}_5\text{C}_2\text{H}_5\text{NBr}$. When the original
concns. of (I), (II), and (III) are equal, the velocity coeff. is increased
by (III) by a factor of 1.5 – 2.5. The temp. coeff. of these reactions
is not affected by the catalysts. J. J. B.

SOV/124-57-7 7867

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 57 (USSR)

AUTHOR: Potapov, I. V.

TITLE: Investigation of the Water Hammer in an Annular Duct Provided With Bleeds (Issledovaniye gidravlicheskogo udara v koltsevom truboprovode s otvodami)

PERIODICAL: Tr. Novocherkas. politekhn. in-ta, 1956, Nr 33/47, pp 115-125

ABSTRACT: A description is given of an experimental investigation of the water hammer in an annular duct with and without bleeds. On the basis of the processed experimental data for a symmetrical annular duct with and without side bleeds, when there is no major discharge and during a sudden closing of the slide-gate, the use of N. Ye. Zhukovskiy's formula is proposed in the form given below

$$\Delta H = 1.12 \frac{a}{g\sigma} Q \text{ m H}_2\text{O column}$$

Here Q is in liters/sec; and in the other parameters the dimensional values of the lengths are given in meters.

G. V. Aronovich

Card 1/1

POTAPOV, I. V.

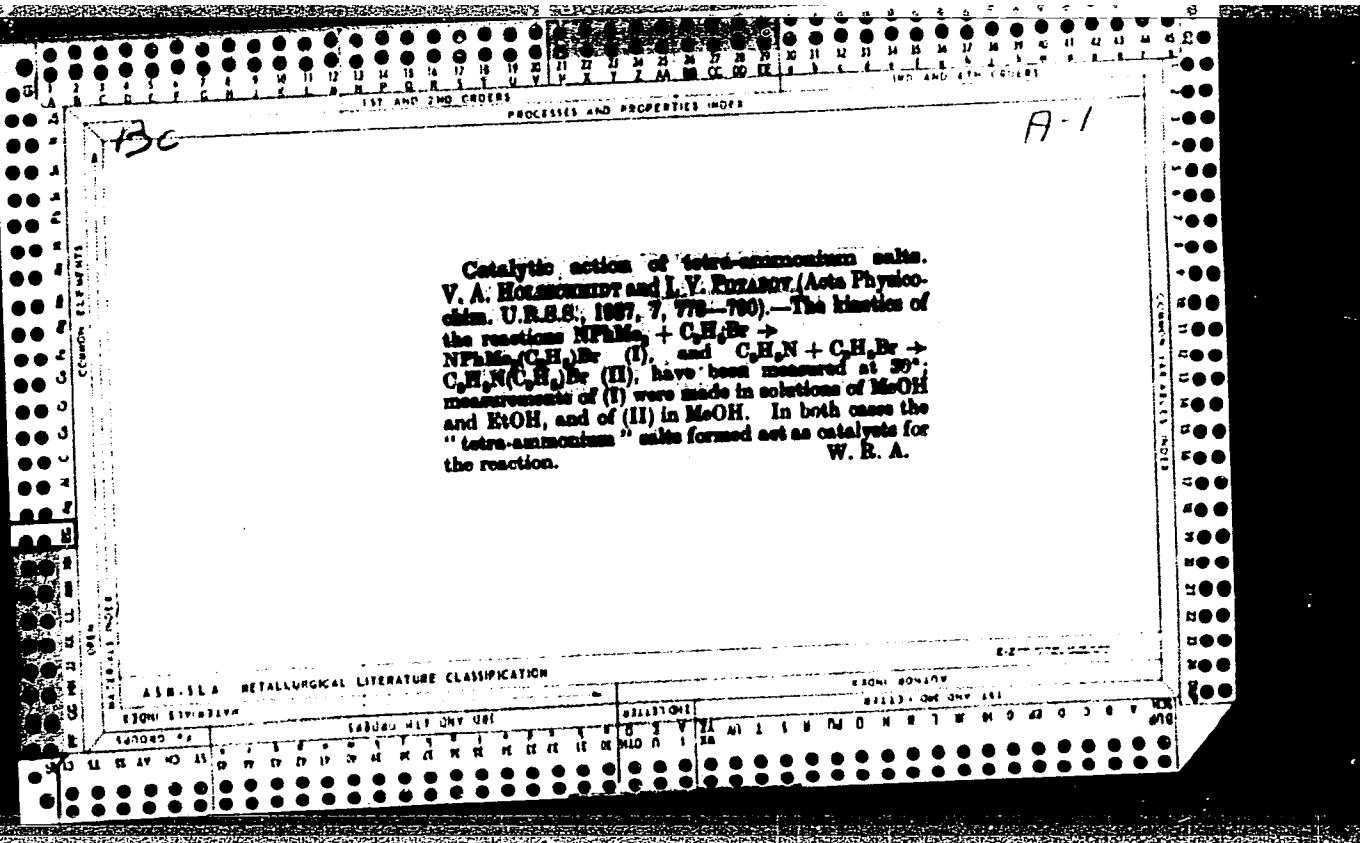
POTAPOV, I. V.: "Investigation and calculation of the hydraulic shock in some systems of the water-supply network". Novocherkassk, 1955. Min Higher Education USSR. Novocherkassk Soil-Improvement Engineering Inst. (Dissertation for the Degree of Candidate of TECHNICAL Sciences)

SO: Knizhnaya Letopis' No. 51, 10 December 1955

POTAPOV, I. V.
V. A. HOETZSHMIDT, ZhOKh 6, 757-63, 1936

Catalytic action of tetra-ammonium salts.
 V. A. HOUZERKHOV and L. V. KIZAROV, (Acta Physico-
 chim. U.R.S.S., 1937, 7, 778-780).—The kinetics of
 the reactions NPF_6Mg^+ + $\text{C}_6\text{H}_5\text{Br} \rightarrow$
 $\text{NPF}_6\text{Mg}(\text{C}_6\text{H}_5)\text{Br}$ (I), and $\text{C}_6\text{H}_5\text{N}^+ + \text{C}_6\text{H}_5\text{Br} \rightarrow$
 $\text{C}_6\text{H}_5\text{N}(\text{C}_6\text{H}_5)\text{Br}$ (II), have been measured at 35°; the
 measurements of (I) were made in solutions of MeOH
 and EtOH , and of (II) in MeOH . In both cases the
 "tetra-ammonium" salts formed act as catalysts for
 the reaction.

W. R. A.



STROCHKOV, A.A., inzh.; POTAPOV, I.V., inzh.

Switch mechanism without a counterweight. Put' i put. khoz. no. 5:27
Ag '59. (MIRA 13:3)
(Railroads--Switches)

10-17/0V, L-1 U

POTAPOV, I.V., starshiy nropodavatel'.

Investigating the hydraulic impact in annular pipelines with branched
pipes. Trudy NPI 33:115-125 '56. (MLRA 10:9)
(Hydrodynamics) (Pipelines)

POTAPOV, I.V.

Passage of a hydraulic hammer wave through the pressure
pipe joints. Trudy NPI 106:75-82 '60. (MIRA 15:5)
(Water hammer)

POTAPOV, I.V., insh.

Electric signal lamps. Zhel.dor.transp. 42 no.11:67-68 II '60.
(.HRA 13:11)
(Railroads--Signalizing) (Electric lamps, Portable)

TEYKOVSEV, N.D.; STROCHKOV, A.A.; POTAPOV, I.V.

Hinged crank switch locks. Put' i put.knoz. 5 no.7:18-19
Jl '61. (MIRA 14:8)
(Railroads--Switches)

VASIL'YEVA, M.S.; CHIGARKIN, A.V.; KONOBRITSKAYA, Ye.M., kand. geo-r.nauk,
otv.red.; POTAPOV, I.Ye., red.; VELIKHO, G.N., tekhn.red.

[Nature and economy of the Dzhezkazgan industrial region] Pri-
roda i khoziaistvo Dzhezkazganskogo promyshlennogo raiona.
Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1959. 96 p.

(MIRA 13:1)

(Dzhezkazgan District--Economic conditions)

ICIMOV, R.

Korsomel'skaya Grupp'a Na Preobrazhenskii.

SN 25444

SO: LETCHIS No. 34

... , ... , ... , ...

COLLECTIVE FARMS - KAZAKHSSKAYA SSR

Book on the work practice of a leading collective farm ("Vpered" Collective Farm, A.N. Moryganov, A.P. Verdyshhev, authors) Lekh.proiz., 12 No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress November 1952. UNCLASSIFIED

ANDREW, A.P. and ROBERTS, MR.

ANDREW, A.P.

Book on the work practice of China in collective industry, published in 1952.
Author: Levin. Published in Moscow, No. 1, 1952, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953; Uncl. ²

LARIONOV, Aleksey Prokof'yevich, kand. ekon. nauk; POTAPOV, Kh.Ye., red.;
GERASIMOVA, Ye.S., tekhn. red.

[Establishing work standards and wage schedules on collective and
state farms] Normirovanie i tarifikatsiya truda v kolkhozakh i sov-
khozakh. Moskva, Gosplanizdat, 1961. 167 p. (MIRA 14:6)
(Agriculture--Production standards) (Agricultural wages)

VERZHER, V.G., red.; KARNAUKHOVA, Ye.S., red.; POTAPOV, Kh.Ye., red.;
POLOMAREVA, A.A., tekhn.red.

[Calculating production costs on collective farms] Voprosy
ischisleniya sebestoimosti produktsii v kolkhozakh. Pod red.
V.G.Benzhera i E.S.Karnaukhovoi. Moskva, Gosplanizdat, 1959.
163 p. (MIRA 12:10)

1. Akademiya nauk SSSR. Institut ekonomiki.
(Collective farms--Costs)

POTAPOV, KV. FM.

28488

Opyt. Osvojeniya travopolnykh syevostorotov. (Kol'koz "23 - ya zemovshchina oktyabrya" tayshyet. Rayon I ritut. Obl.) Sov. Agronomiya, 1948, No. 9, S. 51-54. Bulashyevskiy, A. A. dialyektika nyeolkhodimosti I sluchaynosti V michurinskoy tyeorii - Sm. 28298

SO: LITOPIS No. 34

POTAPOV, KH. YE.

36270

Perevodoy kolkhoz chuvashskoy ASSR (kolkhoz im. Voroshilova. Tali' chikob. Rayon). Sov. Agronomiya, 1949, No. 11, s. 70-74

SO: Letoos' Zhurnal'nykh Statey, No. 49, 1949

IVANCHENKO, Anatoliy Antonovich; MINAKOV, Pavel Semenovich; POTAPOV,
Kh.Ye., red.; OVCHINNIKOV, N.G., red.; GERASIMOVA, Ye.S.,
tekhn.red.

[Method of planning labor productivity in agriculture] Voprosy
metodiki planirovaniia proizvoditel'nosti truda v sel'skom
khoziaistve. Moskva, Gosplanizdat, 1960. 142 p.

(MIRA 13:5)

(Agriculture--Labor productivity)

TULUPNIKOV, L.A.; SOLOV'IEV, A.V.; BATOVA, N.T.; GAVRILOV, V.I., kand. ekonom.nauk; SHIMKO, N.I.; POLOVENKO, I.S., kand.ekonom.nauk; POTAPOV, Kh.Ye., red.; OVCHINNIKOV, N.G., red.; PONOMAREVA, A.A., tekhn.red.

[Problems pertaining to long-range planning and systems of management on collective and state farms] Voprosy perspektivnogo planirovaniia i sistemy vedeniya khoziaistva v kolkhozakh i sovkhozakh. Moskva, Gosplanizdat, 1960. 681 p.

(MIRA 14:3)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut ekonomiki sel'skogo khozyaystva. 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina; direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for Tulupnikov). 3. Zamestitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for Gavrilov). 4. Rukovoditel' otdela Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for Polovenko).

(Collective farms) (State farms)

HUSAKOV, Georgiy Kuz'mich, kand.sel'skokhoz.nauk; MILYAVSKIY, Il'ya Osipovich, kand.sel'skokhoz.nauk; KHABAROV, Nikolay Fedorovich, agronom-ekonomist; POTAPOV, Kh.Ye., red.; POHOMAREVA, A.A., tekhn.red.

[Planning and business accounting in brigades and sections of collective farms] Planirovanie i khoziaistvennyi raschet v brigadakh i na fermakh kolkhoza. Moskva, Gosplanizdat, 1961. 190 p.

(MIRA 14:2)

(Collective farms--Finance)

OKHAPKIN, Konstantin Afanas'yevich, kand.sel'skokhoz.nauk. Prinimali.uchastiye:
IVIN, I.A., kand.sel'skokhoz.nauk, starshiy nauchnyy sotrudnik; LA-
RIONOV, A.P., kand.ekonom.nauk, starshiy nauchnyy sotrudnik; BRAN'KOV,
P.G., mladshiy nauchnyy sotrudnik; KARPUSHENKO, A.I., mladshiy
nauchnyy sotrudnik; NOVIKOVA, Ye.S., mladshiy nauchnyy sotrudnik;
RUMYANTSEVA, T.V., mladshiy nauchnyy sotrudnik; ARKHPOVA, V.F.;
VESELOVA, V.I.; ZANTSEVICH, R.M.; KHRAMOVA, A.M.; YELFIMOVA, Ye.V.,
aspirantka. POTAPOV, Kh.Ye., red.; PONOMAREVA, A.A., tekhn.red.

[Economic effectiveness of monetary wages on collective farms]
Ekonomicheskaja effektivnost' denezhnoi oplaty truda v kolkhozakh.
Moskva, Gosplanizdat, 1960. 217 p.

(MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ekonomiki sel'skogo
khozyaystva (for Ivin, Larionov, Bran'kov, Karpushenko, Novikova,
Rumyantseva, Yelfimova). 2. Nauchno-tehnicheskiye sotrudniki Vse-
soyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo
khozyaystva (for Arkhipova, Veselova, Zantsevich, Khramova).

(Wages) (Collective farms)

IGNATOV, Leonid Petrovich; STAROVOYTOV, Konstantin Semenovich;
POTAPOV, Kh.Ye., red.; PONOMAREVA, A.A., tekhn. red.

[Some problems of agricultural planning] Nekotorye voprosy
planirovaniia sel'skogo khozaiistva. Moskva, Izd-vo ekon.
lit-ry, 1961. 207 p. (MIRA 15:4)
(Farm management)

VENZHER, Vladimir Grigor'yevich, doktor ekonom.nauk; POTAPOV, Kh.Ye.,
red.; PONOMAREVA, A.A., tekhn.red.

[Utilizing the law of value in collective farm production]
Voprosy ispol'zovaniia zakona stoimosti v kolkhoznom proizvodstve.
Moskva, Gosplanizdat, 1960. 318 p. (MIRA 13:9)
(Value) (Collective farms)

1. POTAPOV, KH. YE.
2. USSR(600)
4. Collective Farms
7. Consolidation of collective farms and increase in their communal wealth on the basis of their agricultural level. Sov. Agron. 10 no. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, Feb. 1953. Unclassified.

POTAPOV KH. YE.

PA 44/49/T9

USSR/Agriculture
Plants - Cultivation

Apr 49

"Results of Experiments Conducted at T. S.
Mal'tsev's Kolkhoz "Zavety Lenina," Kh. Ye.
Potapov, 3 pp

"Sov Agron" No 4

Kolkhoz is in Shadrinskiy Rayon, Kurgan
Oblast, a semiarid trans-Urals region with
limited, sporadic rainfall. Potapov, kolkhoz
director, briefly gives methods he has employed
to maintain a steady increase in harvests.
Recommends using Mal'tsev's methods on all
kolkhozes in this region.

LC

44/49T9

POTAPOV, Kh. Ye.,; KHOLIN, I.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Collective farms on the upswing] Kolkhozy na krutom pod'eme.
Moskva, Gosplanizdat, 1958. 95 p. (MIRA 11:11)
(Collective farms)

ZASLAVSKAYA, T.I., kand.ekon.nauk, KOTOV, G.G., doktor ekon.nauk, red.;
POTAPOV, Kh.Ye., red.; GERASIMOVA, Ye.S. tekhn.red.

[Principle of material interest and wages on collective farms]
Printsip material'noi zainteresovannosti i oplata truda v kolkhozakh.
Pod red. G.G. Kotova. Moskva, Gosplanizdat, 1958. 161 p. (MIRA 11:9)
(Wages)
(Collective farms)

ZOTOV, Vasiliy Petrovich; OVCHINNIKOV, N.G., red.; POTAPOV, Kh.Ye., red.;
PONOMAREVA, A.A., tekhn.red.

[Light industry and food industry of the U.S.S.R. (1959-1965)]
Legkaya i pishchevaya promyshlennost' S.S.R., 1959-1965 gg. Moskva,
Gosplanizdat, 1959. 191 p.
(Russia--Industries) (MIRA 13:1)

POTAPOV, K. I., Engineer, and SHALAYEV, A. M.

"Radio Communications" a chapter in the book Radio and Electronics and Their Technical Applications, by A. I., Berg, et al. Moscow 1956.

Summary of chapter 1071291

BELOV, A.F.; POTAPOV, L.F.

Effect of work on the working capacity and the fatigability
of workers in the carbon disulfide department of the Ryazan
Combine of Artificial Fibers. Nauch. trudy Riaz. med.inst.
(MIRA 18:12)
23:65-71 '63.

1. Kafedra fiziologii (zav. kafedroy - prof. V.F. Shirokiy)
Ryazanskogo meditsinskogo instituta imeni akademika I.P.
Pavlova.

21396

S/120/61/000/002/006/0⁴²
E032/E11⁴

9,7500

AUTHORS:

Dayon, M.I., Volynskiy, V.Kh., and Potapov, L.I.
A telescope of spark counters in a magnetic field:
an apparatus for measuring pulses of fast charged
particles

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No.2, pp. 47-52

TEXT: The design of the spark counters employed in this work is illustrated in Figs. 1 and 2. In Fig. 2 the notation is as follows: 1 - perspex; 2 - glass; 3 - conducting layer; 4 - rubber, 5 - TiO₂ + Lac; 6 - Teflon or polystyrene. A pumping line is provided through which the counter can be evacuated and then filled with the required gas. The upper electrode is in the form of a conducting layer of SnO₂ and its thickness is 1.7 mm. The observation and photography of the spark discharge is carried out through the upper electrode. The lower electrode is in the form of an aluminium foil mounted on glass. The distance between the electrodes is 2 mm and depends on the size of the cylindrical inserts shown in Fig. 2. Edge effects giving rise to breakdown are prevented by the TiO₂ + lac coating. Dry air at 1 atm was at first Card 1/ 8

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E032/E114

A telescope of spark counters in a magnetic field: an apparatus for measuring pulses of fast charged particles

tried as the working gas, as suggested by J.E. Cranshaw and I.F. de Beer (Ref.3: Nuovo cimento, 1957, 5, No.5, 1107). However, air was found to be unsatisfactory because of spurious sparks and other effects. The final working gas was a mixture of dry air (dried with P_2O_5), argon (300 mm Hg) and C_2H_5N at a total pressure of 1 atm. Since perspex will gradually absorb pyridine, it is necessary to operate the counter with the pyridine vapour pressure very nearly at the saturation value. This is ensured by introducing about 1 cm³ of pyridine into the working volume in a special container. Fig.3 shows the circuit employed in testing and in efficiency measurements. The spark counter MC (IS) is placed in a telescope consisting of two sets of geiger counters ГC (GS). When the particle passes through the system a positive pulse is produced by the coincidence circuit which triggers the ТГИ 1-325/16 (TGI 1-325/16) thyratrons. Two pulses (with opposite polarities) are produced at the points K and M when the two L-C lines discharge through the thyratrons.

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E032/E114

A telescope of spark counters in a magnetic field: an apparatus for measuring pulses of fast charged particles

They are 0.5 μ sec long and are applied to the plates of the spark counter. The pulses are delayed by about 1.0 μ sec relative to the entry of the particle. A constant clearing voltage (8 V) is also applied across the counter. Another circuit in which the counters were operated with exponential voltage pulses is shown in Fig.36 (J.E. Cranshaw and I.F. de Beer, Ref.3). The mechanical counter MC I was used to record the total number of twofold coincidences while the mechanical counter MC II recorded the number of spark counter operations. The spark discharge in the counter was recorded by the small microphone M. Argon-filled counters have also been investigated using the circuit shown in Fig.36 and the results will be described separately (V.Kh. Volynskiy, M.I. Dayon, A.K. Ponosov, PTE, 1961 (to be published) Ref.5). Fig.4 shows the efficiency of the present counter as a function of the applied voltage. This curve was obtained at room temperature (20 ± 3 °C). As a rule, the length of the plateau exceeds 1000 volts. This curve was obtained by triggering the thyratron system with pulses

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E032/E114

A telescope of spark counters in a magnetic field: an apparatus
for measuring pulses of fast charged particles

from a special oscillator. The second part of the present paper
is concerned with the spark counter telescope placed in the
magnetic field. The telescope consists of three counters placed
in the gap of an electromagnet, gap size $60 \times 20 \times 10 \text{ cm}^3$. The
maximum field was 6300 oe. The working area of each counter plate
was $100 \times 200 \text{ mm}^2$. The spark discharge was photographed by three
cameras on a single film as shown in Fig. 5. The notation in Fig. 5
is as follows: 1,2,3 - objectives; 4,5,6 - mirrors; 7,8,9 -
coordinate grids; 10,11,12 - spark counters; 13,14,15 - geiger
counters. The grids were specially illuminated so that the
sparks could be seen against them and their coordinates easily
measured. The voltage was applied to the spark counters when there
was a coincidence between pulses from a series of three thin-walled
geiger counters. It was found in about 97% of cases the root mean
square distance of the spark from the particle trajectory was
about 0.2 mm. The telescope has been used to measure the momenta
of fast charged particles ($\sim 10^{10} - 10^{11} \text{ ev/c}$). A similar

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EO32/E114

A telescope of spark counters ...
arrangement has been described by P.G. Henning (Ref.8: Atomkern
Energie, 1957, 3, 81) and O.C. Allkofer (Ref.9: Atomkern Energie,
1959, 10, 389). Acknowledgements are expressed to A.I. Alikhanyan
for his interest in this work and to M.M. Veremeyev, V.B. Yeliseyev,
S.S. Kulikov and A.K. Ponosov for assistance in the experiments.
There are 7 figures and 9 references; 5 Soviet and 4 non-Soviet.

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SUBMITTED: February 26 1960

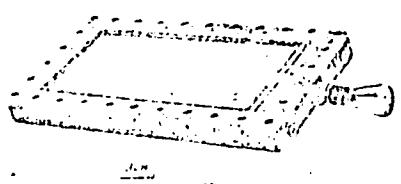


Рис. 1. Общий вид счетчика

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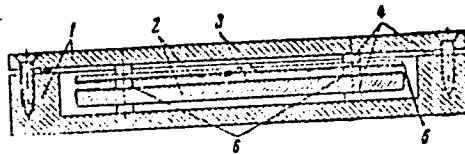


Рис. 2. Разрез счетчика. 1 — пlexиглас, 2 — стекло, 3 — проводящий слой, 4 — резина, 5 — TiO_2 + лак, 6 — тefлон (или полистирол)

Fig. 2

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E032/E114

A telescope of spark counters

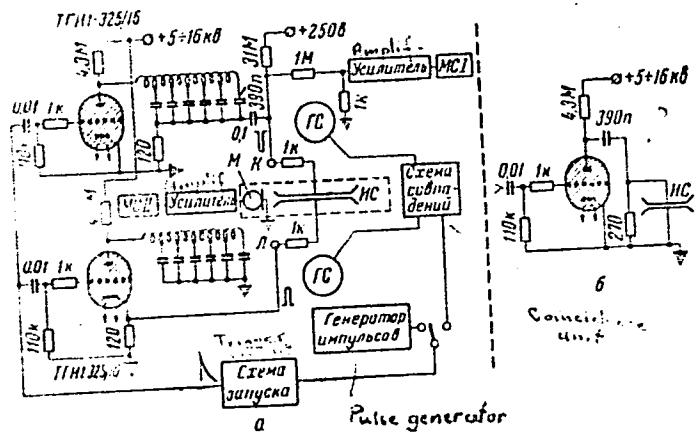


Рис. 3. Схема питания счетчика

Fig. 3

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A telescope of spark counters

Fig. 4

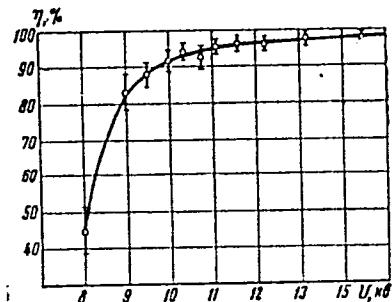


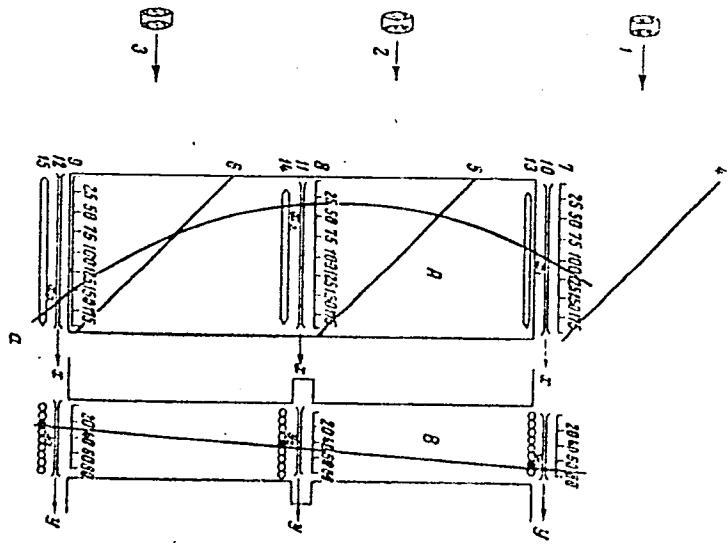
Рис. 4. Зависимость эффективности счетчика от высоковольтного напряжения

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A telescope of spark counters



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Fig. 5a